UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 18 1998

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations for the Idaho Chemical Processing Plant Superfund Site

FROM: Bruce K. Means, Chair
National Remedy Review Board

TO: Randy Smith, Director
Environmental Cleanup Office
EPA Region 10

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for Waste Area Group Three (Idaho Chemical Processing Plant) at the Idaho National Engineering and Environmental Laboratory (INEEL) Superfund Site near Idaho Falls, ID. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost proposed response actions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds $30 million, or (2) the preferred alternative costs more than $10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative.

The NRRB review evaluates the proposed actions for consistency with the National Contingency Plan and relevant Superfund policy and guidance. It focuses on the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; Regional, State/tribal, and other stakeholder opinions on the proposed actions, and any other relevant factors.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency's current delegations or alter in any way the public's role in site decisions.

NRRB Advisory Recommendations

The NRRB reviewed the information package for the site and discussed related issues with EPA's Keith Rose, and Scott Reno of the Idaho Department of Health and Welfare on February 3, 1998. Based on this review and discussion, the Board offers the following comments.

General Comments.

- The Board found it difficult to see the relationship among several Waste Area subunits and their preferred alternatives. It recommends that the decision documents include an explanation of the relationship between various soil groupings, the perched ground water, and the Snake River Plain aquifer in the context of a clearly integrated site-wide cleanup strategy.

- The Board found the information on cost estimates difficult to understand. The Board recommends that DOE restructure this cost information so decision makers and others can more easily compare the costs of the competing alternatives (see the National Contingency Plan, 40 CFR 300.430(e)(9)(iii)(G)). This information should (1) be presented in the decision documents; (2) include present worth costs for specific alternative actions; and (3) exclude baseline operating costs for the facility which will be incurred regardless of cleanup approach or outcome.

- DOE 's proposed cleanup strategy relies on a future residential land use scenario (assumed to begin in 100 years) to determine its soil cleanup levels and excavation depths. In particular, the excavation depth may be a significant cost driver at this site. The Board believes that an industrial land use scenario may be more appropriate for this site given its current use and its location with respect to other developing residential areas. The Board recommends that DOE conduct an analysis comparing the effects that each scenario may have on remediation costs.

Ground Water Actions.

- The decision documents do not clearly explain how selection of the natural attenuation remedy for the Snake River Plain aquifer is consistent with OSWER guidance (OSWER Directive 9200.4-17 "Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Sites," November 1997, see especially pp. 4, 6,11-15, 17-18). The Board recommends that the decision documents be revised to show how issues addressed in this guidance such as source control (pp. 16-17), preferred attenuation mechanisms (p. 6), plume boundary status (pp. 11-15), and complex hydro geologic setting were considered in selecting monitored natural

attenuation over other alternatives such as active remediation, physical or hydrological containment, or waiving of standards due to technical impracticability. The Board also suggests that the documents include a brief discussion of how monitoring data (including data on contaminant levels and plume movement) will be used to confirm the predicted attenuation of contaminants and to trigger active contingency remedies (see pp. 17, 19-20).

- DOE proposes a $5.2 million interim action to control precipitation run on and minimize infiltration in the tank farm area. While such actions may be warranted, it was not clear from the presentation that the resulting potential for reduced mobility of subsurface contaminants in this area was sufficiently evaluated. Such an analysis would be important to justify the costs of this interim action given that final groundwater actions will begin at the site within six years. The Board recommends that DOE assess the need for this early action by evaluating the potential reduction in contaminant mobility that would result, and its significance in the overall groundwater cleanup strategy for this Waste Area Group.

Soil actions.

- The NCP sets forth program expectations to treat principal threats wherever practicable (40 CFR 300.430(a)(1)(iii)). Another expectation is to contain low level threats, because treatment for these wastes may not be cost effective or practicable. The NCP also states that, for many sites, EPA will use a combination of treatment and containment. These expectations are discussed further in "A Guide to Principal Threat and Low Level Threat Wastes" (OSWER Directive 9380.3-06FS, November 1991). The Board recommends that DOE include in the decision documents for this site its rationale for managing the site's principal threat source materials through containment.

- The Board understands that DOE plans to construct a site-wide waste management facility. The Board supports this proposal, but recommends that DOE provide a detailed discussion about this proposed facility in the proposed plan including information such as the nature and volumes of soil to be placed in the facility.

- DOE proposes to take action on contaminated soils under buildings and structures scheduled for demolition and disposal (D&D). It is not clear at this time how extensive this future D&D work may be. Given this uncertainty, DOE should defer selecting between alternative 2 and alternative 3 for this action and conduct a post demolition and disposal assessment to determine which of the two alternatives should be selected. The Board recommends that DOE keep the planned on-site waste consolidation repository option available for these soils if needed.

The NRRB appreciates the Region's efforts to work closely with the State, DOE and the community to identify the current proposed remedy. The Board members also express their appreciation to the Region and State for their participation in the review process. We encourage Region 10 management and staff to work with their Regional NRRB representative and the Region 4/10 Accelerated Response Center at Headquarters to discuss any appropriate follow-up actions.

Please do not hesitate to give me a call if you have any questions at 703-603-8815.

cc: S. Luftig
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